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Every successful researcher does at least two things in a research report: she raises a question that readers want an answer to, and then she answers it. In this chapter, we show you how to get started by finding or inventing a research question interesting enough for readers to care about and challenging enough that you have to research its answer. Then we show you how to plan your project by mapping out the parts of the argument you will need to support that answer.

# 1.1 How Experienced Researchers Think about Their Questions

All researchers gather facts: we'll call them *data*. But they use those data in different ways. Some people gather data on a topic just to satisfy their curiosity: for example, there are history buffs who collect *stories about the Battle of the Alamo* because the history of the Alamo is their hobby. In that case, they don't have to care whether others are interested: they can research in whatever way they want and needn't bother to write up what they find.

Most researchers, however, do their research in order to share it—because their colleagues or clients need it, because they think their question and its answer are important to others, or just because they want others to know something interesting. But when researchers share their results, they have to offer

more than just random data they happened to dig up on their topic. They look for and report only certain kinds of data—those that they can use to show that they have found a sound, reliable answer to a research question, such as *Why has the Alamo story become a national legend?* In other words, they look for and report data that they can use as evidence to support a claim that answers a question.

The best researchers, however, try to do more than just convince others that their answer is sound. They also show why that answer is worth knowing by showing why their question was worth asking in the first place. In a business setting, researchers usually show why their research helps someone decide what to do:

If we can understand why our customers are moving to the competition, we can know what we have to change to keep them.

But in an academic setting, researchers usually show how the answer to their research question helps others understand some bigger, more important issue:

Historians have long been concerned with how we Americans developed our sense of national identity. If we can figure out why the Alamo story has become a national legend, then we might better understand how regional myths like the Battle of the Alamo have shaped that national identity.

But even if you cannot imagine yourself appealing to historians, you can locate that larger issue in the context of your class:

A major issue in this class has been how we Americans developed our sense of national identity. If we can figure out why the Alamo story has become a national legend, then we might better understand how regional myths like the Battle of the Alamo have shaped that national identity.

You can find out whether your question is a worthy one by describing your project in a sentence like this one:

- 1. I am working on the topic of stories about the Battle of the Alamo,
  - 2. because I want to find out why its story became a national legend,
    - 3. so that I can help my classmates understand how such regional myths have shaped America's sense of a national identity.

In its second and third parts, this sentence takes you beyond a mere topic to state a question *and* its importance to readers.

When you state why your research question is important *to your readers*, you turn it into a research problem. A research problem is simply a question whose answer is needed by specific readers because without it they will suffer a cost. That cost is what transforms a question that is merely interesting to you into one that you expect others to care about.

#### TQS: How to Identify a Worthy Research Question

You can help y	ourself think ab	out your project	ct by describ	oing it in a th	ree-step
sentence that	states your Topi	C + QUESTION	+ SIGNIFIC	ANCE (or TQS	5):

Γ	OPIC: I am working on the topic of,	
	QUESTION: because I want to find out,	
	SIGNIFICANCE: so that I can help others understand	

Don't worry if at first you cannot find a worthy significance for the third step. As you develop your answer, you'll find ways to explain why your question is worth asking.

Note: Like all of the formulas you will find in this book, the TQS formula is intended only to prime your thinking. Use it to plan and test your question, but don't expect to put it in your paper in exactly this form. You will use its information in your introduction, but not the sentence itself (see chapter 13).

That three-step TQS sentence is worth a closer look because the success of your project will depend on your ability to discover or invent a good research question.

#### 1.1.1 Topic: "I am working on the topic of . . ."

Researchers often begin with just a topic, something that sparks their curiosity, such as the Battle of the Alamo. But if you stop there, you've got problems. Even a focused topic is a poor guide to your work. You can only mound up notes on the facts you happen to find on your topic. You will have no principled way to decide which facts to look for, which ones to use in your paper, and which to discard. When that happens, students typically run into trouble, in the form of a data dump. They dump everything into a report that reads like a grab bag of barely connected facts. Most readers quickly become bored, asking, Why are you telling me this? They might read on, but only if they are already interested in the topic. But even readers fascinated with your topic will want to know: What do these facts add up to?

#### 1.1.2 Question: "... because I want to find out how or why ..."

Experienced researchers don't start their research until they have not just a topic but a question about it, such as Why has the regional story of the Alamo become a national legend?

Researchers know that readers want the facts they read about to add up to something. Specifically, they want those facts to back up some main finding—a claim that adds to their knowledge or understanding. But they will think that claim is worth reading about only if it answers some research question. WithAt the same time, you need such a question to guide the research leading up to your paper: without one you will struggle to know what information you need. All you can do is discover everything you can about your topic and hope you can pull it together at the end. But with a research question, you can know what facts to look for and, when you find them, which ones to use in your paper—those facts that are relevant to your question. (As we'll see later, you'll need not only the facts that support your answer but also any ones that might seem to discredit it.)

You may have to do some preliminary reading about your topic to come up with a question, but in every research project, formulating that question is the crucial first step.

# 1.1.3 Significance/So What: "... so that I can help others understand how or why ..."

Experienced researchers also know, however, that readers won't be interested in just any research question. They want to know why the answer you have found is worth knowing. So once you find a question that you like, expect that readers will ask you a question of their own: *So what?* 

You could ask the question How many cats slept in the Alamo the night before the battle? but who would care about its answer? All but the most fanatical catlovers would want to know: So what? Why should I care about those cats? Readers ask So what? about all research questions, not just the off-the-wall ones. If you tell readers that you want to research the question Why has the regional story of the Alamo become a national legend?, you should expect them to ask in turn: So what? Why should I care that you can explain that? Your answer must point them to the significance of its answer: If we can find that out, we might better understand the bigger issue of how regional stories shape our national identity. Experienced researchers know that readers care about a question only when its answer might make them say not So what? but That's worth knowing!

Of course, professional researchers have a big advantage: they already know what issues their readers care about. Students, especially beginners, have less to go on. So don't worry if at first you cannot find some great significance to your research question. Keep hunting for a good *So what?*, but all won't be lost if you don't find one. As long as you find a question in any way relevant to your class, you can always explain its significance in terms of the class (for more on this, see 13.1.3):

... so that I can help my classmates understand how such regional myths have shaped America's sense of a unified national identity, which has been an important issue in our study of American diversity.

#### 1.2 Two Kinds of Research Questions

Research questions come in two varieties. One kind of question concerns what we should do to address a tangible problem. We call such questions practical. Practical questions are common in the professions, business, and government. The other kind of question concerns what we should think. We call such questions conceptual. Conceptual questions are also common in the professions, business, and government, when their answers help us understand what causes a practical problem. But conceptual questions are most common in the academic world. You will need to distinguish the two kinds of research questions because your teachers usually expect you to address conceptual questions rather than practical ones.

## 1.2.1 Practical Questions: What Should We Do?

The answer to a practical question tells us what to do to change or fix some troublesome or at least improvable situation. You can recognize a practical question by looking at the third step in the TQS formula: that step states both the practical problem and something we should do to change it.

T: I am working on the topic of A, (What's interesting about that?)

Q: because I want to find out B, (So what if you do?)

S: so that I can help others know what to do to fix C.

Suppose, for example, someone asked about your research as an intern in the Dean of Students' office:

Q: What are you doing for your internship?

A: As part of our binge-drinking project, I'm researching incoming students' assumptions about how much their colleagues drink.

Q: What do you want to know about that?

A: We know that first-year students assume that college students drink more than they really do, but we don't know whether they develop that false assumption before they arrive on campus or after they begin to hear drinking stories from their upper-class colleagues.

Q: So what if you know that?

S

A: Then our office can know how to give students a more realistic picture in our safe-drinking orientation.

What makes this *practical* research is that you are interested in the question chiefly because you want to use the answer to decide what to do about a troublesome practical problem, in this case binge drinking by students.

# 1.2.2 Conceptual Questions: What Should We Think?

Academic researchers ask a different kind of question. Its answer doesn't tell us what to do to change the world, but only how to understand it better: How does the irreverent sitcom The Simpsons reinforce traditional, conservative values? Why do unwed teen mothers keep their babies? When does a cult become a religion?

You can recognize a conceptual question because its significance in the third step concerns not what we do but what we understand:

T: I am working on the topic of A, (What's interesting about that?)

Q: because I want to find out B, (So what if you do?)

S: so that I can help others **understand** how/why/whether C.

Suppose, for example, that you had to ask your teacher's approval for the topic of your research paper:

Q: What are doing for your paper?

A: I want to write on the early years of Motown Records.

Q: What do you want to know about that?

A: I want to find out how and why Motown "smoothed out" African American roots music for white audiences.

Q: So what if you know that? What does that tell us?

A: If we can explain how Motown was able to appeal to those audiences, we can better understand how the so-called "mainstream" culture was really a composite of ethnic cultures.

Q: Now that would be interesting.

S

# 1.2.3 The Challenge of Answering So What? for Conceptual Questions

Students can be impatient with conceptual questions because they seem irrelevant to the genuinely serious problems in the "real" world. Many can't even imagine an answer to a *So what?* question like this one: *So what if we don't understand why Shakespeare had Lady Macbeth die offstage?* (No one asks *So what?* of a researcher trying to understand how to cure Alzheimer's.) Even if you share that impatience, do not try to build your project around a major practical problem. You can't expect to solve the world's problems in the classroom. For now, keep in mind that you are just getting started in your career as a researcher and that the modest questions you can answer in a few pages are likely to have modest consequences.

You can also look forward to a day when you can answer conceptual questions relevant to the practical problems that beset us. Before we can solve an important practical problem, we almost always have to do conceptual research

to understand its causes and effects. We often use the answer to a conceptual question to solve an unanticipated practical problem, as when the Pentagon recently used historical research on the fall of empires to create a plan for the future of the U.S. military.

Try to be patient if at the start of your project you cannot think of any good answers to So what?—even the most experienced researchers sometimes have to find their results before they can say why they are worth knowing. Remember that you'll need some answer by the end, and keep your eye out for larger issues as you do your reading. (We'll show you what to look for in chapter 4.) The more often you imagine others asking So what? and the more often you practice answering it, even if only to your own satisfaction, the more confident you can be that you can succeed at every researcher's toughest task—convincing others that your work is worth their time.

#### 1.3 How Researchers Think about Their Answers/Arguments

Students are often surprised to realize that what they had thought was the main job of research—looking up information on a topic—is a small part of a successful research project. Before you start looking things up, you have to find a good research question to guide your reading and note taking: what you look for is information that will support and/or test an answer to that question. But once you think you have found an answer, your work has just begun. Readers won't accept that answer just because you believe it: you have to give them good reasons to believe it too. And they won't just take your word that your reasons are good ones: you have to support each reason with reliable evidence. In short, readers expect you to offer a complete and convincing argument that uses the information you have found to explain and support your answer.

#### 1.3.1 Think of Your Readers as Allies, Not Opponents

By argument, we do not mean anything like the heated exchanges you see on TV or among your friends, where anything goes because all anyone cares about is winning. Unfortunately, many students imagine all arguments are like that, partly because the loud and angry ones are so memorable but also because the language we use to describe argument makes it sound like combat:

I will defend my position from the attack of my opposition; then I will marshal my most powerful evidence to counterattack. I'll probe for weak spots in the other position, so that I can undermine it and knock down its key claims. We will fire away at each other until one or the other of us gives up and surrenders, leaving only the victor and the vanquished.

Experienced researchers know that they would be foolish to treat readers like enemies to be vanquished. To succeed, a researcher must enlist readers as allies who agree to do or think what the researcher claims they should. If

you hope to win over your readers, you must adopt a stance that encourages them not to be defensive but receptive, because you treat their views, beliefs, and questions with respect. That does *not* mean telling them only what they already believe or want to hear—after all, your ultimate goal is to change their minds. But you do have to attend closely to what you know (or imagine) your readers already believe, so that you can move them from where they are to where your new claim would lead them.

#### CAUTION

#### Don't Pander to Teachers

Many students are rewarded in high school for writing papers that tell teachers what they want to hear by repeating what the teacher has already said. But that can be a grave mistake in college: it bores your teachers, who think it is not enough that you just rehash what's said in class and in the readings. They want to see not only that you know the class material but that you can use that knowledge to think for yourself. If your papers, especially your research papers, merely summarize what you've read or repeat back your teacher's ideas, you will get that dreaded comment: This does not go far enough.

When your teacher says that you must *make* an argument to support your answer, don't think of *having* an argument, in which everyone battles for their position and no one changes their minds. Instead, imagine an intense, yet amiable conversation with people who want to find a good answer to your question as much or even more than you do. They don't want to hear about your opinions but about reasoned claims you can support. They want to know what reasons led you to your claim and what evidence makes you think those reasons are true. Because this is a conversation, they'll expect you to consider their point of view and to address any questions or concerns they might have. And they'll expect you to be forthcoming about any gaps in your argument or complications in your evidence. In short, they want you to work *with* them to achieve the best available answer, not for all time but for now.

# 1.3.2 Think of Your Argument as Answers to Readers' Questions

To create that kind of argument, you will have to answer the questions that any rational person would ask whenever you ask them to do or believe something new. Each answer corresponds to one of the parts of argument.

- **1.3.2.1** The Core of an Argument: Claim + Reasons + Evidence Your answers to the first three questions constitute the core of your argument.
  - 1. Claim: What's the answer to your question? Once you raise your research question, readers naturally want to know the answer. That answer is what you claim and then support.

Although many people think that black musical artists of the 1950s and 1960s were harmed when white performers "covered" black records by creating their own versions to sell to white audiences, I claim that the practice of racial covering actually helped the original artists more than it harmed them.claim

2. Reasons: Why should I believe that? Unless your answer is obvious (in which case, the question was not worth asking), readers will not accept it at face value. They'll want to know why they should accept your claim as true.

Although..., I claim that the practice of racial covering actually helped the original artists more than it harmed them claim because without covers white teens would not have heard or bought the original recordings, reason 1 because covers gave white audiences a taste for blues, R&B, and gospel, reason 2 and because white teens then began to seek out the work of black performers. reason 3

3. Evidence: How do you know that? Even when your reasons seem plausible, responsible readers won't accept them just on your say-so. They expect you to ground each reason in the factual evidence you collect from sources.

Although . . . , I claim that . . . claim because . . . . reasons My evidence that white teens would not have heard or bought the original recordings is as follows: [sales statistics, information on record distribution and radio play, quotations from performers and producers at the time, etc.].evidence for reason 1

#### 1.3.2.2 Acknowledging Readers' Voices

You'll have the basis for a sound argument once you can offer readers a claim that answers your question, reasons to believe that they should accept your claim, and evidence showing that those reasons are true. These three elements make up the core of every argument. But if you offer only the reasons and evidence that you think support your claim, thoughtful readers may feel that you have not dealt with them fairly. They want to know not only what you found that supports your claim, but also what you found that might work against, or at least complicate it—especially if they have views that are different from yours.

So in addition to the reasons and evidence that you pull together to support your claim, you should answer questions that might seem to challenge it:

4. Acknowledgment and Response: But what about this other view? You cannot expect your readers to think exactly as you do. They will know things you don't, they will believe things you don't, and they may even distrust the kind of argument you want to make. If you adopt a genuinely cooperative stance, then you are obliged to acknowledge and respond to at least some of the questions that arise because of those differences.

I claim that....claim + reasons + evidence To be sure, there were many elements of exploitation in racial covering. The white performers, not the black artists, received the money and fame. And many artists of the 1950s never received any of the benefits that came later. acknowledgment But covers helped to bring about a situation in which black artists are among our most popular, influential, and wealthy pop musicians. response

#### 1.3.2.3 Explaining Your Logic

In some cases, researchers make arguments in which they have to explain not only their reasons and evidence, but their principles of reasoning. Suppose, for example, you were visiting your friend Paul in Cajun country. It is a warm July evening, so he invites you to go for a walk on the levee, and then he adds, "You might want to put on long sleeves." This makes no sense, so you ask, "Why?" "Because the sun's going down," he replies. Now you are truly baffled. You understand Paul's claim, and you can see the sun going down. But you just cannot understand why that means you should wear long sleeves on a warm July night. His reason is true, and his evidence is good. But his argument so far fails.

That's when we need a warrant, when readers understand our claim and accept our reason and evidence, but do not see why the reason (the sun going down) supports the claim (you need long sleeves). So now you ask again: "Why does the sun doing down mean that I need long sleeves?" As it happens, Paul has a good answer in the form of a warrant: "Ah," he says. "You don't know about swamp country. When the sun goes down, the mosquitoes come out. If you don't cover up, they will eat you alive."

Now it all makes sense. As an expert in swamp-country living, Paul knew a principle of reasoning that you did not: When the sun goes down, you should protect your skin from mosquitoes. Once you learn the principle, you can accept the claim (though you might wonder why anyone would go walking among mosquitoes that want to eat you alive).

A warrant states a principle of reasoning of the form: When this condition is true, we can draw this conclusion. They are used most often when an expert (Paul) makes an argument about something he knows well (swamp-country living) for someone who is not an expert (you). The expert (Paul) needs a warrant if the non-expert (you) understands a claim (put on long sleeves) and accepts the truth of its supporting reason (the sun is going down) but doesn't see how the reason supports the claim. The warrant supplies the missing connection: "When the sun goes down, the mosquitoes come out, and you must protect your skin from bites. So wear long sleeves to protect your arms."

5. Warrant: Why does that evidence support your claim? When readers see the world in ways that are very different from yours, they may not recognize what general principle of reasoning connects your reasons and your claims. This situation rarely arises when you write a paper for a class, but it might. For example, you would have to supply a warrant if some readers asked, But why

does it matter that white teens would not have heard R&B without covers? How does that show that covers helped more than harmed black artists? To which you would have to reply with a general principle:

An artist benefits from any product that expands his audience for future sales, even if he makes no money off the sale of that product.warrant

For the most part, only advanced researchers need warrants, most often when experts write for readers who are not experts, when they use a new or controversial research method, or when they address a controversial issue. You probably won't have to explain your logic in a paper for a class, so we will not dwell on this fifth question. But you should know that readers might ask it.

# Use the Parts of Argument to Guide Your Research

1.3.3

A research question helps guide your research because it tells you generally what information to look for: whatever is relevant to answering your question. But in the parts of argument you have an even better guide. As you search for and read your sources, remember that you will need information to answer at least four questions that every cooperative argument must address.

## Plan Your Research Around the Questions of Argument

Every argument must answer the three questions that define the core of a research argument, and cooperative ones must also answer a fourth.

1. What's the answer to your research question? Claim 2. Why should I believe that? Reasons How do you know that reason is true? Evidence 3. But have you considered this view? Acknowledgment [or this evidence, complication, objection, etc.] & Response

Create a plan to search for and read sources so that you have good answers to each of these questions:

- 1. Claim: If you begin without a plausible claim that answers your research question, start by reading general treatments of your topic in order to get ideas for possible answers.
- 2. Reasons: Once you have a claim that can serve as an hypothesis, make a list of the reasons why you think that claim is true. If you think of too few plausible reasons, do some more general reading. If you still can't find any, look for another claim.
- 3. Evidence: Once you have a list of reasons, search for specific data that might serve as evidence to support each one. Depending on the kind of reason, that evidence might be statistics, quotations, observations, or

any other facts. If you cannot find evidence for a reason, then you have to replace that reason. If you find evidence that goes against a reason, keep the evidence. You may need to acknowledge it in your paper.

4. Acknowledgment & Response: As you read for claims, reasons, and evidence, keep a record of anything that might complicate or contradict your argument. You will need to acknowledge it if you think it might also occur to your readers.

We discuss these steps more fully in chapters 6 and 7.

#### How You Can Best Think about Your Project 1.4

You have learned a great deal new about writing research papers, and it's only the end of the first chapter. We'll cover this ground again in later chapters, where we'll go step-by-step through the process of planning, researching, drafting, and revising your paper. Don't expect to walk though those steps exactly as we lay them out—research is too messy, with lots of looping back and jumping forward. But if you stay flexible and take it one step at a time, you'll get through the process easily enough.

#### 1.4.1 Focus on Convincing Readers, Not on Filling Pages

For now, we would like you to focus not on the steps but on creating an overall mental picture of research that you will keep in mind as you work. Unfortunately, the two most popular pictures are ones we hope you will avoid. In the first, you think of your project as no more than looking up information. All that matters is the hunt. What comes after is an afterthought.

Q: How's your project coming?

A: Good. I dug up lots of information from lots of sources (even including a bunch of print sources from the library). All I have to do is figure out how to organize my notes and then I can just write it all up.

In the second picture, you think of your project as filling up pages. All that matters is mounding up enough information to fill the assigned number of pages:

Q: How's your project coming?

A: Good. I have a four-point outline and I've found three pages of stuff on the first two points. All I need is three more pages on the second two points and I'm done.

If you think of your project in these ways, you'll doom yourself to failure.

Although you and your teacher might say that your assignment is to write a research paper, we urge you to think instead in terms of a research project. Writing a research paper is only one step in a complex process in which (1) you

find a research question important to you and to your readers; (2) you decide what information you need to find based on the question you ask; (3) you use the information you find to select and then test the best answer to your research question; and (4) you finally present that answer and its support in a way that anticipates readers' questions.

As you begin to plan for your project, let these principles be your guide:

- Don't think that your primary task is to collect and organize information from sources (though you will have to do that). Your task is to ask and answer a research question that interests you and your readers.
- Don't think that when you write your paper your goal is to fill up a certain number of pages with the information you've found. Your paper is what you say to your readers, what you use to communicate your question, its answer, and your argument supporting that answer.
- Most importantly, don't think of research as a solitary endeavor. Keep your readers with you from start to finish.

If right from the start you focus on asking and answering questions, you'll find it easier to do the things that will produce a successful paper. Focus on finding stuff to fill pages, and you're sure to go wrong.

#### Picture Yourself in Conversation with Your Readers 1.4.2

As you plan, research, and draft your paper, picture yourself in an imaginary conversation with your readers. Imagine those readers as interested and inquisitive colleagues, even partners, who want an answer as much as you do. You welcome their questions because they help you know what to say and how to say it. If you can do that, your paper will be better. But just as importantly, you'll be preparing yourself for the day when your readers are indeed colleagues who need from you the best answers you and they can find.

Imagine that conversation taking place not in a classroom, but sitting around a table. Your question grabs their attention because they recognize that they'll be worse off if they can't find an answer. You share not just your answer, but all the information you can find that is relevant to deciding whether your answer is a good one. In sharing that information, you try to anticipate their questions. You are candid enough to acknowledge any information that challenges or complicates your answer, and you address objections they might have. Even so, they have many more questions, alternative explanations, and other issues—each of which you consider and address as fairly as you can. In short, you join with your readers in working through the task of finding and testing the best answer you can find. If you think of your project in these terms, you'll make more good decisions and waste less time as you write your paper. You'll also find that in making your work matter to your readers, you make it matter to you as well.

#### WORKING IN GROUPS

#### **Find Surrogate Readers**

You can help yourself think of your paper as a conversation with readers if you talk about your work to your family, friends, and classmates. Later we will suggest that you form a writing group for testing your storyboard and draft. But it may not be too early to form an informal group even before you find a question. Recruit three or four classmates who will join you for coffee or lunch just to talk over your earliest ideas. At this point, you don't need suggestions, just a sympathetic ear. You will also learn just from listening: the more you experience what your readers will, the easier it will be to imagine them.

# 1.5 How to Plan Your Time (No One-Draft Wonders Allowed)

Have you ever heard the tale of the one-draft wonder? That's the student who starts writing a paper at midnight before the deadline, knocks out one quick yet perfect draft, and then receives the best grade in the class. The one-draft wonder is one of the more enduring school-based urban legends: the two of us hear such tales all the time, but we've never seen the real thing. We couldn't pull it off when we were in school, and we've never taught a student who could do it either—though we have taught too many students who hoped they could fool us with weak drafts that were all too obviously written the midnight before.

You can't hope to write a decent research paper if you begin the night or even the week before it's due. This is confirmed not only by the thousands of students we've known but by studies of successful and unsuccessful writers. This research shows that the most successful writers tend to share some writing habits:

- They start drafting as soon as possible, before they think they have all the evidence they might need.
- They write in regular short periods rather than in marathon bursts that dull their thinking and kill their interest.
- They set a goal to produce a small number of pages every time they write, even if those pages are not very good.
- · They report their progress to someone else if possible, or on a chart if not.
- · They anticipate that everything will take longer than they think it should.

To make these insights work for you, you'll have to back-plan from your due date to set interim goals with specific deadlines. Start by giving your-self at least one working session to proofread; then set aside time for a final revision—at least two working sessions for a paper under seven pages, twice that for a longer one. Depending on how long your paper is and how quickly you draft, set aside enough time to compete a draft, then add 20 percent. You'll

need at least a day before that to review and revise your argument. Next, set aside the time you'll need for finding and reading sources, then add 20 percent. Finally, you'll need a day or two to find and test your research question. Plot these interim deadlines on a calendar, and keep track of your progress as you go. If you need a deadline to motivate you to work, find someone who will get on your case if you miss one of these interim deadlines.

One of the pleasures of a research project is the opportunity to discover something new, at least to you, perhaps to everyone else. It's a thoughtful process that requires you to consider and reconsider what you learn, both when you first find it out and again when you pull everything together. That kind of reflection takes time. To get the time you need, you need a plan that lets you start early, progress steadily, and reflect regularly.